

Response to Amendment

1. The amendments filed on 02/13/2008 and 01/15/2008 have been entered.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

3. Authorization for this examiner's amendment was given in a telephone interview with Michele Conover on March 18, 2008.

4. The application has been amended as follows:

Claim 13 has been cancelled.

Claim 23 has been replaced with the following claim 23:

Claim 23 (Currently Amended): A method for virtual reality guided instrument positioning, comprising the steps of:

- defining a real target point on or within a real object;
- defining a path to reach the real target point on or within said real object;
- tracking a pose of a real instrument with respect to a pose of the real object;
- rendering a graphical representation of the real instrument and the path to obtain a virtual instrument and a graphical virtual guide on a display, the graphical representation being rendered with respect to a virtual viewpoint chosen so that a virtual line of sight is viewed in the direction of the virtual path towards the target point for the

virtual instrument to follow during a positioning of the real instrument to the real target point, the graphical virtual guide corresponding to the path, the virtual instrument comprising a 3D structure for line of sight alignment, the 3D structure comprising a plurality of markers centered on and distributed along an axis of the virtual instrument, so that a user can perceive said virtual instrument and the graphical virtual guide and their spatial relationship in a virtual reality view;

aligning the virtual instrument along the virtual line of sight according to the graphical virtual guide in order to accordingly align the real instrument along the path; and

moving the real instrument by the user in response to viewing the virtual instrument and said graphical virtual guide on the display, the real instrument moving along the path towards the real target point keeping the correct alignment by observing and keeping in alignment with the virtual instrument and graphical virtual guide.

5. This Examiner's Amendment was made to better define claim 23 from the prior art of record.

REASONS FOR ALLOWANCE

6. The following is an examiner's statement of reasons for allowance:

Claim 16:

The prior art of record fails to teach or suggest in the context of claim 16 "so that a user can perceive said real instrument and said at least one graphical axis marker and their spatial relationship in an augmented reality view".

Claim 23:

The prior art of record fails to teach or suggest in the context of claim 23 “so that a user can perceive said virtual instrument and the graphical virtual guide and their spatial relationship in a virtual reality view”.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffery A Brier whose telephone number is (571) 272-7656. The examiner can normally be reached on M-F from 7:30 to 4:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi, can be reached at (571) 272-7664. The fax phone Number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Jeffery A. Brier/
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